**Project Option 1.1.1- Establish more primary care clinics: New Baylor Teen Health Clinic at the Tejano Center for Community Concerns**

**Unique RHP Project ID:** 082006001.1.1

**Performing Provider Name/TPI:** Baylor College of Medicine/082006001

**Project Description:**

Texas has the nation’s 4th highest teen pregnancy rate (88 per 1000 Texas girls vs. 70 per 1000 US girls)[[1]](#footnote-1), is third in the nation for teen birth rates (60.7 per 1000 Texas girls vs. 39.1 per 1000 US girls)[[2]](#footnote-2), and is number one in the nation for repeat teen births (23% in Texas vs. 19% in the US)1. Harris County birth rates nearly mirror Texas rates at 63 births per 1000 females aged 15-19[[3]](#footnote-3). Unintended pregnancy is particularly prevalent among African-Americans and Hispanics.Rates of sexually transmitted infections (STI) in Harris County are also much higher than those seen in the nation. For example, Harris County rates of gonorrhea are 916.2 per 100,000 population ages 15-19 vs. 520.9 in the United States.

The Baylor Teen Health Clinic (BTHC) at seven sites in inner city Houston offers accessible, age-appropriate, comprehensive primary care services to adolescents and young adults living in inner-city Houston, where the economic and health disparities are the greatest. Its services include family planning, screening and treatment for STI and HIV, mental health screening, immunization administration, health risk reduction education, prenatal care, sports physicals, wellness exams, nutrition services, counseling and case management. In addition to providing primary care services, the BTHC works with community partners to connect patients to medical specialists as well as dental, mental health and adoption services. The clinic sites currently serve the Greater Third Ward, Greater Fifth Ward, Kashmere Gardens and Acres Home neighborhoods. In 2011, the BTHC had a total of 9,895 unduplicated client visits at the seven sites. During 2011, there were 2,165 chlamydia cases, 671 gonorrhea cases, 22 syphilis cases and 22 HIV cases. A total of 876 teens between the ages 13-22 tested positive for a pregnancy.

**Goal(s) and Relationship to Regional Goal(s):**

The BTHC will establish a clinic at the Tejano Center for Community Concerns (TCCC) in the southeast part of the county to serve as the medical home for adolescents and young adults. By addressing the age-specific needs of the patient population, the BTHC will provide targeted, age-appropriate family planning and STI counseling and treatment in order to lower STI and teen birth rates. These goals are aligned with the regional goals of expanding access to primary care in order to deliver the right care at the right time, reducing teen birth and STI rates. The BTHC increases access to primary care in medically underserved areas and treats all patients who request care, regardless of ability to pay.

**Challenges:**

As indicated previously, Harris County teen birth and STI rates are much higher than the national rates. The BTHC will provide access to family planning services and contraception to reduce the number of unplanned teen births. It will also provide sexual health counseling and STI treatment to decrease the STI rate in the adolescent and young adult populations.

**5-Year Expected Outcome for Provider and Patients:**

Access to primary care will be increased for 1,500 unique patients by DY 5, with at least 10,000 cumulative patient visits anticipated in the first three years. STI rates will be reduced by 5% compared to the patient population’s baseline through counseling and treatment. Teen birth rates will be decreased by 2% compared to the baseline.

**Baseline:**

Baseline data (teen birth and STI rates) for the specific patient population will be established during the first year of the clinic’s opening.

**Rationale:**

The purpose of BTHC is to provide an affordable medical home for underserved adolescents and young adults. Established in 1971, the BTHC has a track record of engaging and empowering teens and young adults. Its care team, which includes physicians, nurse practitioners, social workers and pharmacists, provides both comprehensive and holistic care to its patients.

The clinic at the TCCC is proximal to several medically underserved areas in Houston[[4]](#footnote-4),[[5]](#footnote-5),6 and will provide access to care for the predominantly Hispanic and Latino population[[6]](#footnote-6). The metrics selected reflect salient health needs of the adolescent and young adult population, including access to education, counseling and care for STIs and teen pregnancy. Reproductive and sexual health is one of the seven priorities identified in the National Prevention Strategy published by the National Prevention Counsel and the Office of the Surgeon General[[7]](#footnote-7). The BTHC provides services that address each of the four specific recommendations put forth in the strategy: access to preconception and prenatal care; reproductive and supportive services for sexually active teens, pregnant and parenting women; sexual health education, particularly for adolescents; and early detection and treatment of STIs.

**Project Components:**

Not Applicable / The project option 1.1.1 does not have components

**Milestones & (Metrics):**

Process Milestones and Metrics: P-2 (P-2.1); P-5 (P-5.1)

Improvement Milestones and Metrics: I-12 (I-12.1); I-X (I-X.1, I-X.2, I-X.3)

The BTHC proposes increases in STI counseling, STI treatment and family planning services as improvement measures for the target population, which lacks access to these and is at particular risk. Nearly 50% of newly diagnosed STIs occur among young adults aged 15-24 years[[8]](#footnote-8). According to the CDC, 40% of sexually active teens did not use a condom the last time they had sex[[9]](#footnote-9). The counseling services at the BTHC focus on reduction of risk behaviors, and success will be measured through the proposed Category 3 measures below.

Increased access to family planning and contraception services is another proposed improvement measure. High rates of teen birth in the county (63 per 1,000 females aged 15 to 19) and high rates of repeat teen births (23%) [[10]](#footnote-10) make preventing teen pregnancy a cost effective and healthy strategy.

The mission of the BTHC is to provide access to affordable care for at-risk, underserved teens in the community. By reducing health-risk behaviors through counseling and preventive care, the BTHC will help provide tools for its young patients to make responsible decisions and become contributing members of society.

**Unique community needs identification number:**

This project addresses the following community needs according to the community needs assessment:

* CN1 – Access to primary care
* CN13 – Reduction in teen birth rates
* CN17 – Reduction of high rates of sexually transmitted infections

**How the project represents a new initiative for the Performing Provider or significantly enhances an existing delivery system reform initiative:**

This project significantly enhances the existing delivery system as the expansion to the TCCC will improve primary care access for adolescents and young adults in an area that is medically underserved.

**Related Category 3 Outcome Measures:**

OD- 1 Primary Care and Chronic Disease Management

* IT-1.20 Other Outcome Improvement Target: Reduction of STI Rate among Adolescents and Young Adults
* IT-1.20 Other Outcome Improvement Target: Reduction of Pregnancy Rate among Adolescents and Young Adults

**Reasons/Rationale:**

Because the BTHC focuses on prevention, the proposed Category 3 milestones and metrics are reduced STI and teen pregnancy rates. The chronic illness milestones identified on the Category 3 do not address the salient health issues faced by adolescents and young adults. Because STIs disproportionately affect this population, it is a more appropriate metric that clearly measures the success of the STI counseling proposed in the Category 1 improvement measures.

Similarly, teen pregnancy reduction is an appropriate measure for this population. The milestones identified in Category 3 pertain to improvements in low birth weight, infant mortality, etc., which do not apply if pregnancy is avoided altogether. Decreasing teen pregnancies and births will indicate that the BTHC succeeds in providing access to family planning and contraception services.

**Relationship to Other Projects:**

Like the Fifth Ward Clinic (project 082006001.2.1), the BTHC will provide primary care services in a medically underserved area. However, the BTHC is situated in a different geographic area and targets a specific age cohort.

**Relationship to Other Performing Providers’ Projects in the RHP:**

Primary Care/Ambulatory Care clinics are a top priority to Region 3 due to the acuity of the regional patient mix, population concentration, and lack of primary care access points for our patient base. The regional approach of collaboration as well as existing patient referral pattern relationships allowed our team to properly identify the community needs based on the necessity of population, uninsured, and medically underserved patient bases. This program is consistent with our region and similar to numerous initiatives in our RHP plan sharing both concepts as well as outcome measures focused to percent improvement over baseline of patient satisfaction scores, reduction of inappropriate ED utilization, and third next available appointment status. The Region 3 Initiative Grid attached as a RHP Plan addendum reflects a grid of relationship for all initiatives.

**Plan for Learning Collaborative:**

We plan to participate in a region-wide learning collaborative(s) as offered by the Anchor entity for Region 3, Harris Health System. Our participation in this collaborative with other Performing Providers within the region that have similar projects will facilitate sharing of challenges and testing of new ideas and solutions to promote continuous improvement in our Region’s healthcare system.

**Project Valuation:**

The value of this project was determined by an econometrics assessment of access to primary care; STI counseling, screening and treatment; and teen pregnancy prevention. The value assigned to primary care is based on cost avoidance of emergency room visits. The difference between the cost of an emergency room visit and the cost of a primary care visit for primary-care-treatable conditions per visit was calculated for the age groups in question[[11]](#footnote-11). Historical data were reviewed to determine the percentage of preventive and acute care visits. Rather than assume that all acute care visits could result in an emergency room visit, the project value conservatively estimates that a fraction of acute care visits results in an avoided emergency room visit.

Researchers at the CDC have evaluated the cost effectiveness of STI treatment[[12]](#footnote-12) and developed formulae to assess the direct and indirect cost savings of education, screening and treatment. The formula developed for HIV costs averted by HIV counseling and testing was used to calculate the estimated bundle amount for STI counseling, as HIV counseling is included in all STI education, and screening is available to all patients. The estimated bundle amount for STI treatment was based on the pro rata sequelae costs averted for the treatment of gonorrhea, which is a more conservative estimate than that for treatment of chlamydia or syphilis. Historical data were reviewed to determine the percentage of men vs. women treated. The value for decreases in STI rates is based on treatment and pro rata sequelae costs averted because of reductions in the infections in the population, assuming the reductions occur in a patient population of 1,000 patients.

The National Campaign (to Prevent Teen and Unplanned Pregnancy) determined that the cost to Texas taxpayers for teen births in the state between 1991 and 2004 was $15.1 billion[[13]](#footnote-13). This cost includes medical expenses, welfare services and productivity loss. The costs averted were broken further into episodic costs that include the cost of delivery and healthcare for mother and child the first year after birth. The remainder was prorated for the life of the Waiver. The expected success of family planning was based on the average teen birth rate for Harris County and the weighted average effectiveness for different types of contraception[[14]](#footnote-14) based on the historical administration rates. Teen pregnancy rates in the neighborhoods currently serviced by the Teen Clinic are higher than the Harris County average. By reducing the pregnancy rate, we will achieve additional savings in healthcare costs and taxpayer burden that are not duplicated in the estimated bundle for the rendering of contraception management services.

The total value for the project was combined and distributed across measures to ensure category 3 outcome measurements comprised 5%, 10%, 15% and 20% of the project value in DY2-5. Distribution among the components was based on the weighted value of the measure.

| ***082006001.1.1*** | ***1.1.1*** | | ***N/A*** | ***New Baylor Teen Health Clinic at the Tejano Center for Community Concerns*** | |
| --- | --- | --- | --- | --- | --- |
| *Baylor College of Medicine* | | | | | *082006001* |
| ***Related Category 3 Outcome Measure(s):*** | *IT-1.20*  *IT-1.20* | | *082006001.3.1*  *082006001.3.2* | *Reduction of STI Rate among Adolescents and Young Adults*  *Reduction of Pregnancy Rate among Adolescents and Young Adults* | |
| **Year 2**  **(10/1/2012 – 9/30/2013)** | | **Year 3**  **(10/1/2013 – 9/30/2014)** | | **Year 4**  **(10/1/2014 – 9/30/2015)** | **Year 5**  **(10/1/2015 – 9/30/2016)** |
| **Milestone 1** [P-2]: Implement a community-based clinic at the TCCC.    Metric 1 [P-2.1]: Open one additional clinic at the TCCC.  Goal: Documentation of expansion plan.  Data Source: New primary care schedule.  Milestone 1 Estimated Incentive Payment:$ 300,000  **Milestone 2** [P-5]: Hire one mid-level provider for the TCCC.  Metric 1 [P-5.1]: Documentation of hiring.  Goal: Hire one additional mid-level provider.  Data Source: Documentation from Human Resources.  Milestone 2 Estimated Incentive Payment:$ 283,000 | | **Milestone 3** [I-12]: Increase primary care clinic volume of visits and evidence of improved access for patients seeking services.  Metric 1 [I-12.1]: Increase number of visits.  Baseline: 2,500 patient visits.  Data Source: Patient registry / scheduling system.  Milestone 3 Estimated Incentive Payment: $ 156,000  **Milestone 4** [I-X]: Provide STI counseling and screening to prevent STI transmission.  Metric 1 [I-X.1]: Implement counseling service.  Goal: 1,000 visits that include STI counseling.  Data Source: Patient registry / medical record.  Milestone 4 Estimated Incentive Payment: $ 28,000  **Milestone 5** [I-X]: Treat patients for STIs to reduce transmission and prevent sequelae.  Metric 1 [I-X.2]: Implement treatment services.  Baseline: 800 visits for STI treatment.  Data Source: Patient registry / medical record.  Milestone 5 Estimated Incentive Payment: $ 91,000  **Milestone 6** [I-X]: Provide birth control services to prevent unplanned teen pregnancy.  Metric 1 [I-X.3]: Implement contraception services.  Baseline: 500 patients who accept contraception.  Data Source: Patient registry / medical record.  Milestone 6 Estimated Incentive Payment: $ 297,000 | | **Milestone 7** [I-12]: Increase primary care clinic volume.  Metric 1 [I-12.1]: Increase number of visits by 50% over baseline.  Goal: 3,500 patient visits.  Data Source: Patient registry / scheduling system.  Milestone 7 Estimated Incentive Payment: $ 160,000  **Milestone 8** [I-X]: Increase STI counseling and screening.  Metric 1 [I-X.1]: Increase number of visits by 50% over baseline.  Goal: 1,500 visits that include STI counseling.  Data Source: Patient registry /medical record.  Milestone 8 Estimated Incentive Payment: $ 29,000  **Milestone 9** [I-X]: Increase STI treatments.  Metric 1 [I-X.2]: Increase STI treatment services by 50% over baseline.  Goal: 1,200 visits for STI treatment.  Data Source: Patient registry / medical record.  Milestone 9 Estimated Incentive Payment: $ 93,000  **Milestone 10** [I-X]: Increase birth control services.  Metric 1 [I-X.3]: Increase contraception services by 50% over baseline.  Goal: 750 patients who accept contraception.  Data Source: Patient registry / medical record.  Milestone 10 Estimated Incentive Payment: $ 304,000 | **Milestone 11** [I-12]: Increase primary care clinic volume.  Metric 1 [I-12.1]: Increase number of visits by 100% over baseline.  Goal: 4,000 patient visits.  Data Source: Patient registry / scheduling system.  Milestone 11 Estimated Incentive Payment: $ 162,000  **Milestone 12** [I-X]: Increase STI counseling and screening.  Metric 1 [I-X.1]: Increase number of visits by 100% over baseline.  Goal: 2,000 visits that include STI counseling.  Data Source: Patient registry / medical record.  Milestone 12 Estimated Incentive Payment: $ 30,000  **Milestone 13** [I-X]: Increase STI treatments.  Metric 1 [I-X.2]: Increase STI treatment services by 100% over baseline.  Goal: 1,600 visits for STI treatment.  Data Source: Patient registry / medical record.  Milestone 13 Estimated Incentive Payment: $ 94,000  **Milestone 14** [I-X]: Increase birth control services.  Metric 1 [I-X.3]: Increase contraception services by 100% over baseline.  Goal: 1,000 patients who accept contraception.  Data Source: Patient registry / medical record.  Milestone 14 Estimated Incentive Payment: $ 307,000 |
| Year 2 Estimated Milestone Bundle Amount: $ 583,000 | | Year 3 Estimated Milestone Bundle Amount: $ 572,000 | | Year 4 Estimated Milestone Bundle Amount: $ 586,000 | Year 5 Estimated Milestone Bundle Amount: $ 593,000 |
| **TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD** *(add milestone bundle amounts over Years 2-5)****:***$ 2,334,000 | | | | | |

1. University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation. County Health Rankings and Roadmaps, Harris County. (2012). County Health Rankings. <http://www.countyhealthrankings.org/#app/texas/2012/harris/county/1/overall>. [↑](#footnote-ref-1)
2. Texas Department of State Health Services. Birth Data To Texas Residents 2005-2009, Customized Queries. <http://soupfin.tdh.state.tx.us/birth05.htm>. (accessed August 1, 2012). [↑](#footnote-ref-2)
3. County Health Rankings & Roadmaps. 2012 Harris, Texas, Teen Birth Rate. <http://www.countyhealthrankings.org/node/2758/14>. Accessed October 1, 2012. [↑](#footnote-ref-3)
4. Census Tracts 3115, 3116 and 3117 are immediately adjacent to Census Tract 3201 in which the TCCC is located. [↑](#footnote-ref-4)
5. U.S. Department of Health and Human Services, Health Resources and Services Administration. Find Shortage Areas: MUA/P by State and County. <http://muafind.hrsa.gov/index.aspx>. Accessed October 1, 2012. [↑](#footnote-ref-5)
6. United States Census 2010. 2010 Census Interactive Population Search. <http://2010.census.gov/2010census/popmap/>. Accessed October 1, 2012. Census Tracts 3115, 3116, 3117, 3201, 3202, 3329, 3330. [↑](#footnote-ref-6)
7. National Prevention Council, *National prevention Strategy,* Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General, 2011. [↑](#footnote-ref-7)
8. Weinstock H, Berman S, Cates W. Sexually transmitted diseases among American youth: incidence and prevalence estimates, 2000. Perspectives on Sexual and Reproductive Health 2004;36(1):6-10.  [↑](#footnote-ref-8)
9. <http://www.cdc.gov/healthyyouth/sexualbehaviors/index.htm>. Accessed September 27, 2012. [↑](#footnote-ref-9)
10. Child Trends. Percentage of All Teen Births That Are Repeat Births, and Number of Births to Mothers Under 20, in Large Cities, 2008. <http://www.childtrends.org/Files/Child_Trends_2011_04_14_FG_RepeatBirths2011.pdf>. Accessed October 1, 2012. [↑](#footnote-ref-10)
11. School of Public Health, *Houston Hospitals Emergency Department Use Study: January 1, 2010 through December 31, 2010,* Houston, Texas: University of Texas Health Science Center at Houston, 2012. [↑](#footnote-ref-11)
12. Chesson HW, Collins D, Koski K. Formulas for estimating the costs averted by sexually transmitted infection (STI) prevention programs in the United States. *Cost Effectiveness and Resource Allocation.* 2008; 6:10. [↑](#footnote-ref-12)
13. The National Campaign. By the Numbers: The Public Costs of Teen Childbearing in Texas, November 2006. <http://www.thenationalcampaign.org/costs/pdf/states/texas/fact-sheet.pdf>. Accessed October 1, 2012. [↑](#footnote-ref-13)
14. CDC, Reproductive Health, Contraception. <http://www.cdc.gov/reproductivehealth/unintendedpregnancy/contraception.htm> Accessed October 4, 2012. [↑](#footnote-ref-14)